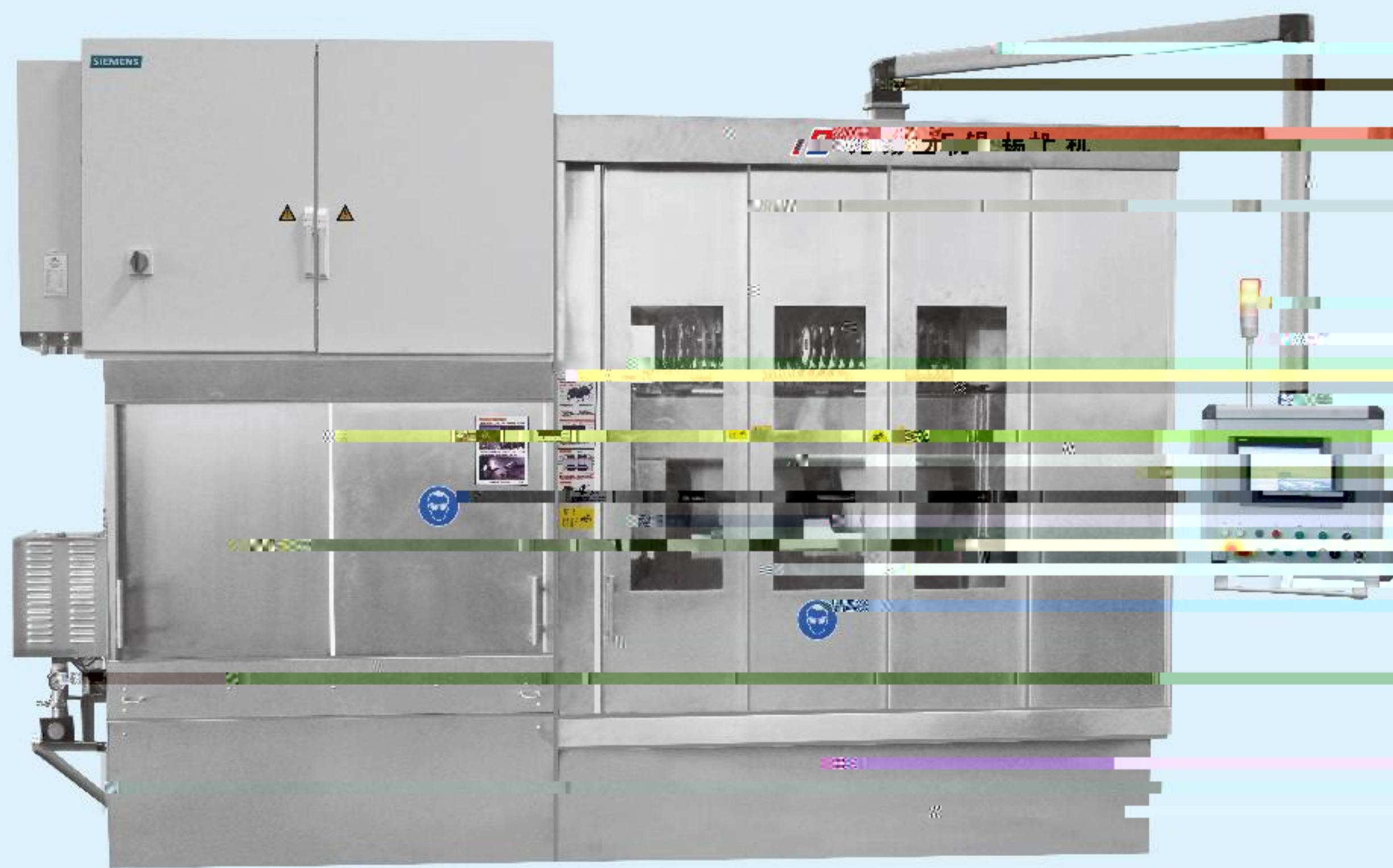


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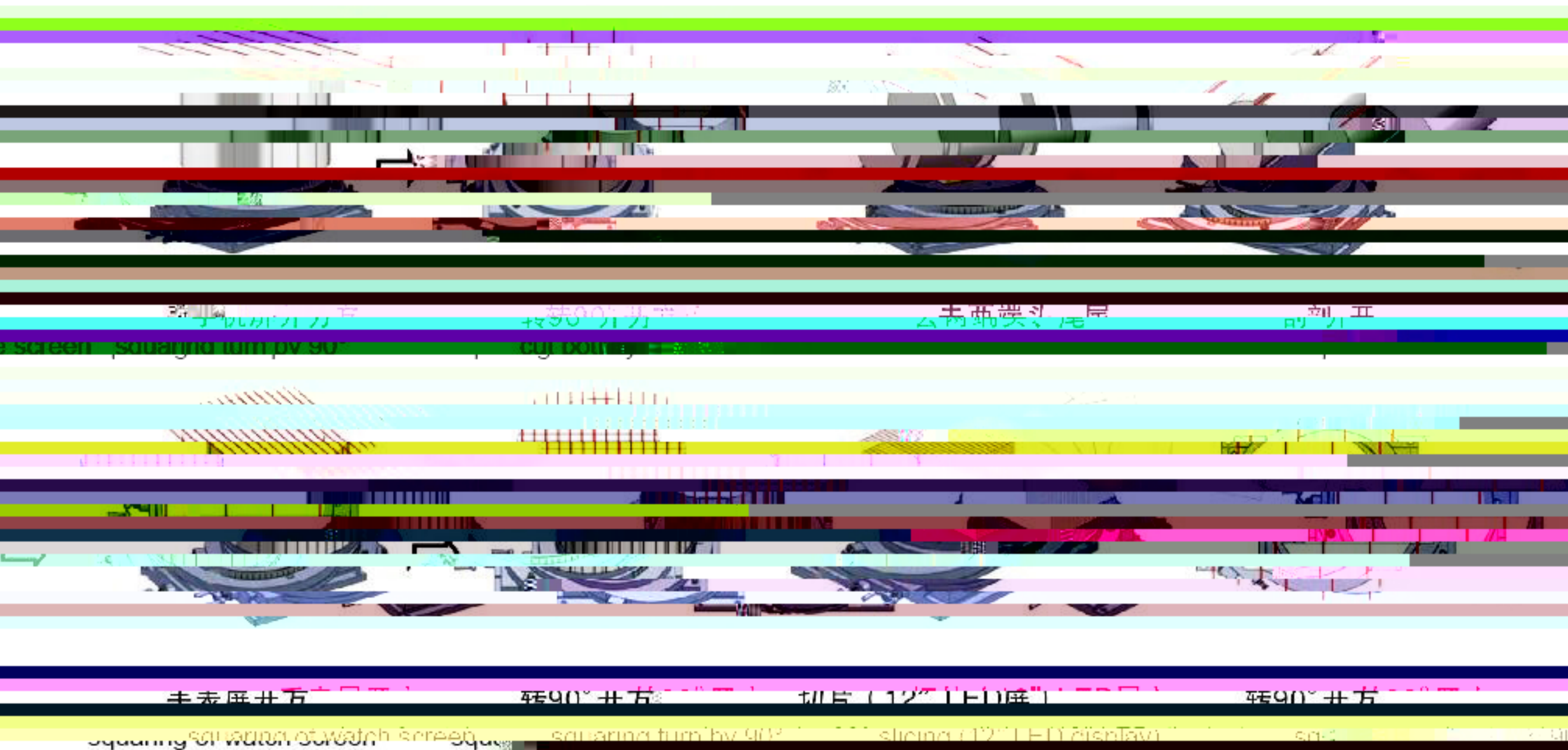
数控金刚线蓝宝石开方机

WSK026 CNC cylindrical plain grinding machine for sapphire



加工工件参数 Main parameters	
工件规格 Workpiece size	Φ500-Φ800 × 3000/3500mm
工件重量 Workpiece weight	1250kg (max)
主要参数 Main parameters	
金刚线直径 Diamond wire diameter	Φ0.05-Φ0.10mm
金刚线速度 Diamond wire speed	1000-1500m/min
网间距 Mesh distance	1.0mm
工件转速 Spindle rotation	工件转速: 0.0-3000rpm/min 进给速度: 0.0-1000mm/min
加速度 Acceleration	5-10m/s ² (max)
线速度 Line speed	20-30m/s (max)
摇摆角度 Swing angle	±10°
摇摆速度 Swing speed	20度/秒 (max)
工件朝向 Workpiece crystal orientation	360° ± 90°
切割方向 Slit angle orientation	新能源系列科技 NEW ENERGY SERIES TECHNOLOGY
电源供给及配套设施 Power supply and auxiliary facilities	
电源要求 Requirement of power	电压 voltage: 380V; 频率 frequency: 50Hz
冷却水流量要求 Cooling water flow rate	10-20L/min
环境温度要求 Environment temperature	15-25℃

设备切割示意图 Equipment cutting diagram



- 本设备为金刚线多线开方机，主要用于新能源行业、蓝宝石锭的开方、切视窗片以及半导体行业、碳化硅棒、多晶硅锭的开方，是新能源的主要配套设备。
- 采用西门子控制技术的机电一体化，15"触控屏。
- 设备布局合理，机械强度高而且热稳定性好；整体外观采用全封闭不锈钢设计。
- 摇摆单元提供了金刚线切割平面磨床的传动结构，提高了晶锭的端面精度，减少了砂轮数量的设计，更有效地降低线耗、磨轮等耗材。
- 模块化组合，上下工作台都可进行360°的旋转调整方向，方便切出任意尺寸。
- 通过调整切割轮上的线宽，方便切割各种尺寸的来料。
- 优化切割参数，提高切割效率，降低切割成本。
- 利用操作手柄，可以快速布置线网，缩短可操作时间，减少人员管理成本。
- 采用双工位，多方位切割，以及灵活的切割速度，应用于蓝宝石的开方以及切割和微切，切割范围玻璃等功能。

- This equipment is diamond wire saw squarer, applied in New Energy industry, processing LED sapphire ingots, cutting windows and used in semi-conductor industry, silicon carbide monocrystalline silicon rod and polysilicon rods, which is the main equipment for new energy industry.
- Apply integrated PLC of SIEMENS controlling system, 15" touch screen.
- Reasonable layout, high mechanical strength and perfect thermal stability. Overall appearance applies full-closed stainless steel design.
- Swing unit optimizes performance of slicing sapphire, shortening time, and improving lead-face quality of ingots, reducing diameter of pulleys, which decreases consumables such as wire and pulleys.
- The equipment can not only cut various sizes, but also adjust the slit width as needed in order to cut different sizes of workpieces that have different crystal orientation by adjusting the wire diameter.
- By requiring gear or wire on cutting wheel, wire with any size of block.
- Optimize to customize tension or control system, high-tension system ensuring quality and efficiency of squaring.
- Use operating handle, fast layout cable, shortening time of standby and reducing management cost.
- Apply double station, multi-angle cutting, and flexible cutting speed, applied to sapphire rod squaring, silicon carbide rod squaring, silicon carbide rod cutting, and glass cutting.